



# QUARTERLY REPORT

SEPTEMBER – NOVEMBER 2011

INCREASING RURAL FARMER INCOME AND FOOD SECURITY THROUGH  
INTEGRATED INITIATIVES FOR ECONOMIC GROWTH IN MALI

## **DECEMBER 2011**

This publication was produced for review by the United States Agency for International Development. It was prepared by Abt Associates, Inc.



# QUARTERLY REPORT

## SEPTEMBER - NOVEMBER 2011

INCREASING RURAL FARMER INCOME AND FOOD SECURITY THROUGH  
INTEGRATED INITIATIVES FOR ECONOMIC GROWTH

### **INTEGRATED INITIATIVES FOR ECONOMIC GROWTH IN MALI (IICEM)**

Contract No.: EDH-I-13-00005-07

#### **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government



# TABLE OF CONTENTS

<b>ACRONYMS.....</b>	<b>I</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>I</b>
Improving Production And Productivity .....	1
Improvement Of Financial Services .....	2
Increasing Access To Market And Trade And Improving Commercialization .....	2
Supporting An Enabling Environment For Agriculture, Trade, And Private Sector Development.....	2
Stimulating Entrepreneurship Through Special Activities Fund (If And Saf), Small Business Developments, And Grants.....	3
Promoting Gender-Equitable Opportunity In Value Chain Development.....	3
Synergistic Activities With Other Partners.....	3
Problems/Challenges.....	4
<b>PLANNED ACTIVITIES .....</b>	<b>5</b>
<b>ACTIVITY PROGRESS.....</b>	<b>7</b>
Improving Production And Productivity .....	7
Expanding/Rehabilitating Irrigated Agriculture .....	7
Progress Towards Improving Production, Productivity, Diversification, And Intensification By Sector.....	7
Millet/Sorghum .....	7
Rice.....	8
Other Revenue Diversification Activities .....	9
Improving Financial Services.....	11
Increasing Access To Markets And Trade, And Improving Commercialization.....	12
Millet/Sorghum .....	12
Rice.....	13
Maize.....	14
Supporting An Enabling Environment For Agriculture, Trade, And Private Sector Development.....	14
Stimulating Entrepreneurship Through Special Activities Funds (Fi, Saf), And Small Business Development .....	16
Gender-Equitable Opportunity In Value Chain Development.....	17
Synergistic Activities With Other Partners.....	18
<b>INDICATORS TABLE .....</b>	<b>20</b>
<b>PROBLEMS / CHALLENGES .....</b>	<b>21</b>



# ACRONYMS

<b>API</b>	<i>Agence pour la Promotion de l'Investissement au Mali</i> Agency for the Promotion of Investment in Mali
<b>BDS</b>	Business Development Services
<b>DNA</b>	Direction Nationale de l'Agriculture
<b>DNP</b>	<i>Direction Nationale de la Pêche</i>
<b>DRA</b>	<i>Direction Régionale de l'Agriculture</i>
<b>E-ATP</b>	Expanded Agribusiness and Trade Promotion (USAID/West Africa)
<b>GMP</b>	Motorized Water Pump
<b>HIMO</b>	High-Intensity Labor Teams
<b>IER</b>	<i>Institut d'Économie Rurale</i> , Institute of Rural Economy
<b>IF</b>	Innovative Fund
<b>IFDC</b>	International Center for Soil Fertility and Agricultural Development
<b>INTSORMIL</b>	Sorghum and Millet Collaborative Research Support Program (USAID)
<b>LTA</b>	<i>Laboratoire de Technologie Alimentaire</i> , Food Technology Laboratory, a unit of IER
<b>NGO</b>	Non-Governmental Organization
<b>NRM</b>	Natural Resource Management
<b>OP</b>	<i>Organisation Paysanne</i> (Farmer/Producer Organization)
<b>OPAM</b>	<i>Office des Produits Agricoles du Mali</i> , Office of Agricultural Products of Mali
<b>OPIB</b>	Office of Baguinéda Irrigated Perimeters
<b>PIV</b>	Irrigated Village Perimeter
<b>RIFAB</b>	<i>Rizerie et Fabrique d'Aliments Bétail</i>
<b>SAF</b>	Strategic Activities Fund
<b>SARL</b>	Limited Liability Corporation
<b>SRI</b>	System of Rice Intensification
<b>USAID</b>	United States Agency for International Development





# EXECUTIVE SUMMARY

The objective of the Integrated Initiatives for Economic Growth (known by its French acronym, IICEM) project is to improve food security in Mali by increasing rural revenue through increased productivity and enhanced trade in basic cereals and horticulture products. More precisely, food security refers to the quantitative and qualitative availability of food products on the local market. This goal can be achieved through increased agricultural productivity, higher crop yield, improved post-harvest practices, and more effective marketing strategies. An increase in rural revenue involves the adoption of innovative agriculture technology which allows for heightened productivity, improved profitability of products, and increased competition in target markets. All this is done within the context of development and diversification of target markets at the national and regional levels.

In pursuit of this goal, organizations assisted by IICEM continue to make advancements in the diversification of agricultural products native to Mali, revenue growth, and the improvement of food security. Over the last three months, USAID has helped rural farmers and merchants achieve 362,595 million FCFA in national and regional sales. This includes the sale of rice in northern markets during the 2010-2011 rainy season and the 2011 off-season, as well as national and regional sales of millet and sorghum.

Below is a summary of IICEM's activities over the course of this quarter, which focused on the five strategic objectives of the contract including cross-cutting activities (natural resource management, facilitation of transportation and commerce, and the promotion of gender equity in the workforce). Note that while the stated reporting period for this report is September through November 2011, the activities were primarily undertaken during the months of October and November, given that the project's implementation activities in September are limited due to post-rainfall realities. USAID can consider this report as marking the start of FY 2012.

## IMPROVING PRODUCTION AND PRODUCTIVITY

During the period of September – December 2011, the following activities were carried out in the millet/sorghum value chain: (i) the selection of new cooperatives in the Sikasso and Bougouni areas to scale up the production and commercialization of millet and sorghum with respect to the 2012-2013 campaign; (ii) determining the millet/sorghum production in the 2011-2012 campaign; and (iii) organizing commercial meetings between producer groups and commercial buyers.

Additionally, IICEM implemented a series of trainings for partner cooperatives on post-harvest management practices and quality control procedures, including regulating moisture and impurity levels in millet/sorghum. IICEM technical experts conducted training in Sikasso and Mopti to the benefit of local NGOs, DRA representatives, and cooperative leaders within the millet sorghum value chain so that producers in these regions would be better equipped to meet product quality requirements of targeted local markets. A total of 61 people, six of whom women, were trained. Thirty-one of these individuals reside in the north, and 30 in the south of Mali.

In the North, rice value chain activities included the introduction of High Intensity Manual Labor (HIMO) to farmers for the scale-up of development activities of irrigated village perimeters (PIV);

the identification of new PIV sites to be developed; the assessment of volume of rice produced in the off-season; the preparation of credit requests for off-season rice production; the supervision of maintenance operations for rainy season rice production; the identification of four (4) new sites for the construction of barrages; determining low-land rice production; and monitoring the 2011-2012 campaign.

## **IMPROVEMENT OF FINANCIAL SERVICES**

This quarter, IICEM's improvement of financial service efforts focused on rice production campaign in the zones of Mopti and Timbuktu. In total, 16 loans were awarded through IICEM's partner banks for a total of 77.714 million FCFA.

The project also engaged in post-financing monitoring activities, following the repayment of loans totaling 141,679,400 FCFA: 63,463,900 FCFA for millet value chain and 78,215,500 FCFA for the rice value chain.

## **INCREASING ACCESS TO MARKET AND TRADE AND IMPROVING COMMERCIALIZATION**

The following activities were performed regarding market improved access to markets: (i) cereal market assessment using data collected from the project's partner vendors, (ii) grain consolidation and storage maintenance through the construction of millet/sorghum storage facilities, (iii) awareness efforts for millet farmers on the importance of group sales.

Within the framework of improved market access and commercialization of rice, this quarter's activities included: (i) equipping four (4) women's groups with rice hulling machines; (ii) identifying the quantities of rice that need to be marketed by the women's groups so that they are able to repay loans taken out for the purchase of inputs; (iii) organizing supply services for semi-industrial rice mills; and (iv) monitoring the marketing of rice from the 2010-20122 growing season as well as the 2011 off-season.

This quarter the project provided training in fish farming and rice growing skills to supervision agents and farmers in the Timbuktu region.

IICEM also coordinated several activities relating to market access and corn trade which, among others included: (i) determining how much corn must be produced in order to repay loans taken out to purchase input technology while also monitoring the inventory of storage facilities; and (ii) establishing commercial relationships between farmer organizations and local cereal vendors.

## **SUPPORTING AN ENABLING ENVIRONMENT FOR AGRICULTURE, TRADE, AND PRIVATE SECTOR DEVELOPMENT**

This quarter, the IICEM enabling environment for agriculture and trade component focused on an analysis and documentation of farmer-based seed certification, an activity undertaken in collaboration with the Agency for the Promotion of Investment in Mali (*API Mali*). A certification workshop was held November 29, marking the last step in the campaign which began in April 2010 with IICEM collaborating with the *Service eRegulations de l'API Mali*. This activity contributes to the realization of results indicator related to the number of analyzed policies /regulations/administrative procedures. The certified procedure is now online and available to all potential users.

Additionally, IICEM proceeded with lobbying efforts designed to reduce cereal trade restrictions.

## **STIMULATING ENTREPRENEURSHIP THROUGH SPECIAL ACTIVITIES FUND (IF AND SAF), SMALL BUSINESS DEVELOPMENTS, AND GRANTS**

Regarding business development and entrepreneurship, this quarter's activities focused on the technical assistance program in business development services available to IICEM's partner businesses. Once completed, diagnostic activities of partner enterprises will provide a specific enterprise profile for the development of a business plan where IICEM will provide technical assistance and financial/investment guidance..

## **PROMOTING GENDER-EQUITABLE OPPORTUNITY IN VALUE CHAIN DEVELOPMENT**

This quarter saw a particular emphasis on gender development across IICEM activities.

Within the objective of increasing production and productivity, plots of land cultivated by women received the same training support as those for men. In the millet/sorghum value chain, women farmers participated in in-depth, thorough demonstrations and explanations of weeding and micro-dosing practices. Within the rice value chain, two out of the 20 organizations benefitting from project assistance were exclusively women (Annya and Nafagoumo of Kabara), while the remaining 18 organizations were comprised of both women and men. Furthermore, the building awareness efforts for village authorities in Baramadougou and Kouin (Mopti) led to the granting of new plots of land to women's groups in new sites: eight women received 2 hectares of land in Baramadougou and three received 0.75 hectares in Kouin.

Concerning expanding market access and improved commercialization, gender-related activities focused on the evaluation of women's processing organizations in Bamako in a cluster of micro-enterprises around Danaya Cereales, SARL in order that they have the capacity to "pre-process" commercial grain for Danaya Cereals, that will finish the processing into final, marketable products. The primary objective of this diagnostic was to identify and evaluate the constraints and opportunities associated with cereal processing in order to train a group of Bamako-based women processors using Danaya Cereals as the market-driver. An additional objective was to promote concrete actions in order to improve/increase the production and marketing of millet-sorghum. An organized "pre-processing" raw material supply chain for Danaya Cereales would enable/ensure as more effective scale-up of processed cereal products for final product markets.

## **SYNERGISTIC ACTIVITIES WITH OTHER PARTNERS**

IICEM works with local institutions, NGOs, and government partners to implement its program activities and to avoid conflicts and miscommunication in the field. This quarter, IICEM collaborated with INTSORMIL in the millet/sorghum value chain to distribute new technology, including the micro-dose method and Toroniou seeds.

In the rice value chain, partner organizations E-ATP, Africare and Syngenta invited IICEM to share its SRI experiences at conferences organized in Mali and Ghana. Through these conferences, around 102 people from the sub-region benefitted from the SRI micro-dose process developed by IICEM.

Furthermore, in partnership with the Mopti Rice Office state agency, the RIFAB mini-rice mill's began an awareness campaign with rice producers to formalize its paddy supply chain.

Other significant collaborations were forged with the *Laboratoire Technologie Alimentaire (LTA)*, API Mali, the Segou DRA, *AMASSA Afrique Verte* and OPAM focusing on training pertaining to millet/sorghum best management and post-harvest practices (moisture and impurity levels, etc.). Sixty one farmers, 6 of whom were women, were trained within the two regions.

## **PROBLEMS/CHALLENGES**

None to report.

# PLANNED ACTIVITIES

## IMPROVING PRODUCTION AND PRODUCTIVITY

The follow activities were planned for this quarter (September – November 2011):

- Sensitizing farmers to the HIMO approach
- Calculating the total production volume of target products and the operating account for the 2011 off-season
- Monitoring maintenance operations of the 2011-2012 off-season
- Training supervision agents on millet post-harvest practices and quality control
- Training supervision agents on fish farming and rice-fish farming techniques

## ENHANCING FINANCIAL SERVICES

IICEM's main financial services activities this quarter consisted of working with partner wholesale merchants to develop business plans, as well as monitoring the progress of loan repayments by borrowers taking part in the Guarantee Fund program.

## INCREASING ACCESS TO MARKETS AND TRADE; AND IMPROVING COMMERCIALIZATION

The following activities were planned for this quarter:

- Monitoring the marketing of the 2010-2011 season and 2011 off-season production;
- Organizing the paddy supply chain for the semi-industrial rice mills;
- Promoting group sales among IICEM partner merchants.

## SUPPORTING AN ENABLING ENVIRONMENT FOR AGRICULTURE, TRADE, AND PRIVATE SECTOR DEVELOPMENT

Planned activities included the following this quarter:

- Analyzing and documenting the process for agricultural seed certification;
- Pursuing a lobbying campaign to suppress hindrances to marketing cereals;
- Participating in the third Africa Regional Conference on Drainage and Irrigation.

## **STIMULATING ENTREPRENEURSHIP WITH SPECIAL FUNDS (IF, SAF), SMALL BUSINESS DEVELOPMENT, AND GRANTS**

This quarter, the project's primary planned activity will be the implementation of a technical assistance system for partner businesses. The system designates one business advisor to provide close guidance and coaching to each business that has received grants through IICEM's Strategic Activities Fund (SAF) or Innovative Fund (IF).

# ACTIVITY PROGRESS

## IMPROVING PRODUCTION AND PRODUCTIVITY

### EXPANDING/REHABILITATING IRRIGATED AGRICULTURE

In the North, activities pertaining to the extension and rehabilitation of irrigated farming focused on sensitizing farmers on the HIMO approach for the development of irrigated village perimeter (PIV). Additionally, the project focused its efforts on identifying new sites for development.

In the Sikasso zone, expansion and rehabilitation of irrigated agriculture activities were limited to field visits to identify four new sites for the construction of weirs.

### PROGRESS TOWARDS IMPROVING PRODUCTION, PRODUCTIVITY, DIVERSIFICATION, AND INTENSIFICATION BY SECTOR

#### MILLET/SORGHUM

##### **Development of farmer organizations and agro-businesses**

This quarter, the project identified new organizations in the Sikasso *Cercle* to take part in a large-scale campaign to popularize millet and sorghum production. Over the course of the quarter, IICEM was able to identify, within four communes in the Sikasso *Cercle*, 18 new farming cooperatives in 18 villages, representing 556 members. These targeted organizations will sow over 2,080 hectares of millet/sorghum. The impacted communes are Danderso, Kignan, Sanzana, and Lobougoula.

##### **Training of trainers (NGOs, DRA sector officials, cooperative leaders) on millet/sorghum Best Post-Harvest and Management Practices, and quality control techniques (moisture level, impurity control)**

This quarter, IICEM collaborated with AMASSA- *Afrique verte*, the *Laboratoire de Technologie Alimentaire* (LTA), and OPAM in Sikasso and Mopti to organize a training-of-trainers workshop on simple quality control methods for millet/sorghum. To confront problems currently facing local markets, the training focused on best management and post-harvest practices, including storage techniques and quality control (how to determine levels of impurity, moisture, and homogeneity). In addition, this training provided farmer organizations with simple tools which will enable them to more effectively respond to the local wholesalers' specifications with regards to quality. Farmers' attention to quality standards emphasized during training sessions will, in turn, allow wholesalers to sell their products at higher prices in targeted quality-demanding commercial grain markets.

This training was directed at IICEM partner NGOs in the field, state agriculture officials, and millet/sorghum cooperative leaders. In total, 61 people were trained, six of whom were women. Those who were trained accepted the responsibility of providing cascade training by passing along to farmer organizations the knowledge acquired through the trainings, thereby allowing the farmer organizations to better conform to market demands.

Training sessions had the added bonus of establishing management and quality control standards, and even resulted in the elaboration of documents outlining quality requirements



specific to cooperatives assisted by IICEM. These documents will be made available to cooperatives following the workshop.

## **RICE**

This quarter, the project assisted women's rice-farming organizations in the Sikasso zone. During the current agriculture campaign, eight women's organizations located in eight villages and numbering 2,986 members received IICEM assistance in lowland rice farming within the Sikasso Cercle. These organizations sowed approximately 2,734 hectares. The general state of the agricultural campaign within these targeted areas is satisfactory. Of these eight organizations, five adopted the SRI technique over an area of 7.58 hectares, thus meeting indicator number 11, "number of additional hectares farmed with the aid of enhanced technology or management practices" (01 FA 0.0 08). The five organizations that adopted the new technology are: the *Union des femmes de Finkolo Ganadougou*; rice farmers of Nièna, the women's cooperative of M'Pegnesso; the Loutana women's association, and the women's cooperative of Kouroumasso.

In the North (Mopti and Timbuktu), this quarter's activities focused largely on the off-season harvest, determining operating balance sheets, and monitoring/advising on the *upkeep* of the rainy season fields, including weeding and the second application of urea in the Irrigated Village Perimeters (PIV).

Within all two regions, off-season farming was undertaken on an area totaling 179 hectares: 97 ha for Mopti, and 82 ha for Timbuktu. The total volume of rice produced was 1,009 tons and distributed among the regions as follows: 533 tons in Mopti, and 476 tons in Timbuktu. The average yields were: 5.5 t/ha in Mopti, and 5.8 t/ha in Timbuktu, for an average of 5.64 t/ha for both regions. During the current rainy season, 2,954 hectares have been sown within the PIV: 1,391 ha in Mopti, and 1,563.51 ha in Timbuktu, including another 4,700 ha in Lake Horo lowlands.

The farmer organizations involved in these different activities in the three regions total 100 organizations: 56 in Mopti, and 44 in Timbuktu. Among these organizations, three are exclusively female: two located in Timbuktu and the third in Mopti. A total of 8,957 rural households received assistance: 3,144 ha in Mopti, and 5,813 in Timbuktu.

The SRI technique was carried out on 134 hectares total, of which 48 ha were in Mopti and 47 ha in Timbuktu for the two seasons (regular and off-season). With regards to new technology, the project introduced and facilitated access to a power-cultivator; 84 farmers in Singo worked 42 ha using this tool.

## **Expansion of SRI micro-dose in the sub-region**

At the request of Africare- Mali, IICEM's rice value chain manager presented IICEM's experiences implementing the SRI practice at a sub-regional meeting. The meeting, held in Goundam (Timbuktu), aimed to share Mali's experience with other agencies in the sub-region, including Africare Burkina Faso, Africare Niger and Africare Chad. 50 people took part in the workshop. As a result of the meeting, it was recognized that SRI should be adapted to lake-zones, such as Lake Horo and Lake Télé, with shallow water farming. Furthermore, it was recognized that tests should be conducted on the local rice species Glabérima (Kobé). And finally, it was agreed that collaboration should be strengthened in order to popularize SRI in other countries in the region.

To further extend the SRI practice in the sub-region, USAID's E-ATP project collaborated with IICEM to organize an SRI method training workshop in Tamale, Ghana. Around 40 people were



in attendance from projects such as Advance /ACDI-VOCA, IFDC, National Rice Farmers, and other NGOs. The workshop was led by an IICEM rice value chain expert.

With the same goal in mind, IICEM's rice expert was asked to present IICEM's SRI practice expertise at a SYNGENTA conference in Bamako for its 30<sup>th</sup> anniversary of service in Mali. 250 people from 20 countries in Africa and Europe participated in this three-day meeting. For this occasion, IICEM's rice expert exhibited IICEM's involvement and expertise in SRI micro-dose during the last three years in various regions of Mali. IICEM's IER partner was present as well to elaborate on collaborative SRI tests performed by IER and IICEM. Setting it apart from the presentations of others, IICEM's stance on SRI was supported with visual explanations and soil demonstrations.

#### **OTHER REVENUE DIVERSIFICATION ACTIVITIES**

##### **Disseminating rainy-season onion production techniques in the Baguinéda zone**

While local horticulture farming during the rainy season can be problematic for many farmers due to harmful pest infestation and disease, it is an excellent opportunity for farmers to sell their products on the market as this is a time when products are in high demand and can, therefore, be sold at higher prices. This supplemental revenue source is crucial for small farmers.

With the goal of aligning farmers with market demands, increasing rural household revenue, and promoting investment in more advanced technology, IICEM collaborated with the Office of Irrigated Perimeters of Baguinéda (*l'Office des Périmètres Irrigués de Baguinéda [OPIB]*). In 2011, the collaboration promoted a rainy-season onion variety (Prema 178) in all garden markets in the zone. This dissemination campaign came about following 2010 pilot test that IICEM conducted in the same zone involving 22 farmers over a total of 3,378 square meters under the technical supervision of OPIB. The 2011 dissemination campaign, covering over 8,178 m<sup>2</sup>, was carried out by the seven best farmers (two women and five men) chosen among 22 farmers involved in the 2010 test.

Over the course of the Prema 178 rainy-season onion variety campaign, the following activities were conducted by IICEM and OPIB:

- Selecting and validating sites for collaborating farmers;
- Practical training on techniques for establishing nurseries;
- Planting and monitoring the onion plots;
- Completing data collection sheets;
- Conducting supervisory field visits;
- Organization of open houses, during which farmers from neighboring villages could come and learn about activities (around 200 farmers);
- Supervising the harvests and weighing output;
- Analyzing data collection sheets and writing the final report

Also, in the interest of doing a large rainy-season onion campaign, farmers were chosen in the four intervention zones of the OPIB (Dougourakoro, Kobalakoro, Baguinéda Camp, Sébela, Kokoun and Mofa). In total, 2,625 grams of rainy-season onion seeds were distributed among the farmer, with IICEM providing the seeds.

The training was comprised of classroom and field work and included general orientation, introduction to the rainy-season variety, and sensitization activities. There was also an on-the-ground supervision/advisory component that was provided from the planting of the nurseries all the way through harvest time.

In addition to the seven farmers IICEM selected for the training, additional farmers participated and took advantage of training/information sessions. These farmers paid for their seeds themselves and benefitted greatly from OPIB guidance.

Planting began in May 2011 on a plot of 8,178 m<sup>2</sup> despite having anticipated 5,772 m<sup>2</sup>, representing a gain of 141.68%.

Of the seven plots that were sown, six were harvested, resulting in a total cultivated area of 5,680 m<sup>2</sup>. The seventh plot, which was the largest at 2,324 m<sup>2</sup>, unfortunately had to be abandoned due to improper use of insecticide.

The total production was 3,826.5 kg with an average yield of 6.70 tons/ha, with a maximum yield of 11.25 tons/ha and minimum of 3 tons/ha.

The large discrepancy in yields can be explained by the supervising agents' level of technical expertise as well as the regularity with which farmers were monitored. The two farmers who reported the highest yields, Mamadou Dieffaga and Abdou Coulibaly, 11.25 and 8.3 tons per hectare respectively, had both already attended onion farming training sessions in Mali and Burkina Faso. The smallest yields, 3 Tons/ha and 3.8 Tons/ha were reported by the two women's group members, Fanta Konaté and Fanta Sidibé. It was noted that the reason for these failed crops was a lack of proper plot maintenance because these women were very busy with rice planting activities, which happened to coincide with rainy-season onion season.

The entire harvest was sold on the local market at an average price of 312.5 FCFA per kilo. Total sales equaled 1,214,450 FCFA with a total production cost of 471,850 FCFA resulting in a profit margin of 752,600 FCFA. This activity demonstrated the high potential value of rainy-season onion farming.

A report on this dissemination campaign came just as IICEM had begun to phase out its shallot/onion value chain activities and after the project had already submitted its 2010-2011 Annual Report, otherwise the results would have been included in that Annual Report.

## **Fish-farming and rice-fish farming**

Within the objective of diversifying farmer revenue and contributing to improved food security, IICEM is increasingly integrating fish-farming into local production systems.

Accordingly, IICEM formalized collaboration with the *Direction Nationale de la Pêche, DNP* (National Fishing Bureau) in order to organize a series of training sessions for rice farming organizations. The objectives of these trainings were, among others, to familiarize beneficiaries with techniques for: collecting fingerling, managing fish farming plots, and preparing fish food.

IICEM provided training on rice-fish farming practices to 22 producers in the Northern regions: 11 participants from the Kabara women's cooperative and 11 training agents for the northern zones. The training themes included: (i) techniques for establishing a rice-fish farming plot, (ii) fish farming in ponds, (iii) preparation of concentrated fish food using locally available agricultural products and bi-products, (iv) identification of *Tilapia Nilotica* species adapted to fish-farming. These last two themes were developed during hands-on practical training sessions.

Following the training, a total area of 0.66 hectares was developed: 0.54 ha, in Gao and 0.125 in Mopti (by farmers from Kouakourou). Thus, the total surface area used for rice-fish farming in this part of the country went from 0.125 ha in 2010 to 0.66 hectares in 2011. The Kabara women's cooperative of Timbuktu, despite having received IICEM assistance, was unable to undertake rice-fish farming during the season; however they plan to pursue it during the off-season. IICEM did, however, provide this cooperative with small tools and materials for their controlled fishing activities; these tools and materials included basins, buckets, scales, measurement instruments.

IICEM also provided the cooperative with ingredients for the fabrication of 2,360 kg of concentrated fish feed so that the women are able to exploit a 240 m<sup>2</sup> trap pond at their disposal.

Within the Office of Irrigated Perimeters of Baguinéda (OPIB), IICEM provided training to 12 participants, eight of whom were farmers and four were training advisors, by means of exchange visits within the zone. Three of the 12 participants were women.

### **Improving natural resource management, biodiversity conservation, and adaptation to climate change**

This quarter, IICEM, through its NRM specialist, conducted a validation mission to assess the pilot study for the classification of the Bagoé forest corridor located in the Dioila Zone of the Koulikoro region. The pilot study was conducted in 2011 by ID-Sahel, a local research firm, with funding from IICEM.

In addition to IICEM's NRM specialist, several local authorities also participated in the validation mission, including: the Deputy Préfet of Dioïla, the billeting officer of the Dioïla Forestry Service, the heads of the Planning and Regulation divisions of the Koulikoro Regional Forestry Service, and the mayors of the Banco, Niantjila and Kilidougou communes. The surface area of the land for classification measured 15,910 hectares in Dioïla and 1,048 hectares in Sikasso. The study covered nine communes, 49 villages and 55,642 residents in Dioïla and two communes, three villages and 3,456 residents in Sikasso. In totality, the classification activities covered 16,958 hectares which encompassed 11 communes, 52 villages, and a total population of 59,098 rural inhabitants. The intended objectives of the classification are to: (i) save the Bagoé forest corridor from the illegal and unregulated exploitation of resources; (ii) maintain and develop the Bagoé River's forest in its entirety; (iii) implicate the river populations and surrounding territories in the management of this important natural resource; and (iv) conserve the biodiversity of the region.

Over the course of this reporting period, IICEM organized workshops in Bougouni and Yanfolila for the flora and fauna redevelopment of the Dialakoro (Bougouni), Djinétoumanina, and Diangoumérila (Yanfolila) classified forests. These workshops were presided by the Bougouni and Yanfolila Prefects and attended by representatives of State technical service agencies, elected officials, and river village authorities. The statute of fauna conservation, which forbids all human activity, including domesticated animals, allows these forests to regenerate their wild flora. The redevelopment document resulting from the workshop will be translated into a decree and given to the Ministry for adoption into law. In total, three conservation decrees are anticipated following this workshop.

## **IMPROVING FINANCIAL SERVICES**

This quarter, access to improved financing methods concerned loans extended to rice farming organizations in Mopti and Timbuktu. In total, 16 loans were awarded at a total value of 77.714 million FCFA.

IICEM staff also conducted post-financing follow ups and consultations to loan beneficiaries. The value of this portfolio of loans totaled 141,679,400 FCFA: of which 63,463,900 FCFA in loans were extended for activities within the millet value chain and 78,215,500 FCFA for the rice value chain.

Post-financing follow-up concerned loans related to the 2011-2012 growing campaign (as well as some 2010-2011 loans in Timbuktu) as well as loans for the procurement of motorized water pumps (GMP) taken out in the Mopti and Timbuktu Regions. . At the time of writing this report, all loans with a repayment deadline of 30 June 2011 had been paid in full with two exceptions: the Gorkomé cooperative of Kano and the Beregoungou OP. The Gorkomé cooperative has an outstanding balance (arrears) of 3,050,000FCFA. The Berergoungou OP has an outstanding balance on two loans it took out in 2009-2010: a loan for the purchase of inputs which has an outstanding balance of 2,785,000 FCFA and a loan totaling 4,860,000 FCFA for the procurement of a GMP for which the organization has made no repayments.

## **INCREASING ACCESS TO MARKETS AND TRADE, AND IMPROVING COMMERCIALIZATION**

### **MILLET/SORGHUM**

#### **Support to vendors to facilitate the introduction of quality millet to the market**

During this quarter, the project monitored the sale of millet and sorghum stock by its partner wholesalers on the national and sub-regional markets. The sale of this stock was assured by the implementation of a supply chain put in place between wholesalers and the IICEM project whereby the products were purchased from area farmers who also work with the IICEM project. This is how, at the national level, wholesaler Sidiki Badjan, through his company *Doumbia et Fils* (SO.D.F), sold 292.5 tons of millet and 259.3 tons of sorghum for a total value of approximately 79.845 million F CFA: 40.950 million FCFA of millet and 38.895 million FCFA of sorghum.

At the sub-regional market, the same merchant, Sidiki Badjan, sold 60 tons of millet in Ivory Coast and 200 tons of sorghum in Senegal for a total value of approximately 44.2 million francs F CFA: 10.200 million FCFA of millet and 34 million FCFA of sorghum.

#### **Support for the consolidation of supplies by the construction of GRAIN storage UNITS**

In order to consolidate small supplies in production zones and provide a more efficient logistical system at the farm-level for developing raw material supply chains, IICEM introduced the construction of storage infrastructure in intervention zones into its 2011-2012 work plan. During this quarter, project undertook preparatory work in order to identify a suitable supplier for the construction materials. The following activities were carried out: (i) identification and selection of 60 villages in the Sikasso and Koutiala *Cercles* where millet/sorghum storage units will be built for a cumulative storage capacity of 6,800 tons; (ii) developing and advertising a call tenders for the building material procurement; (iii) analyzing the bids, selecting a vendor and developing a purchasing agreement for the procurement of the building supplies; and (iv) developing a scope of work for the local (village-level) masons would will build the storage units.

## RICE

Over the course of this quarter, in the southern region (Sikasso), women's rice farmer organizations were targeted for project assistance. In order to determine and consolidate surplus rice production thereby enabling the women to make group sales, IICEM carried out the following activities: (i) determining the quantity of rice paddy that must be sold by the women's groups in order to repay input loans, (ii) monitoring the volume of rice stored in the storage units according to the value of each woman's loan.

Following these activities, it was estimated that 237,900 tons of rice paddy needed to be stored in order for the women to be able to repay their input loans. These stocks will be amassed as soon after the harvest as possible and will be kept in the farmer organizations' storage units for future commercialization. The rice paddy sales price is estimated at 100 FCFA per kilogram, with a total value of 23.8 million FCFA, which corresponds precisely to the value of input credits taken out by IICEM-supervised women's rice farming cooperatives. In the Sikasso zone, this activity implicates the following women's farming cooperatives: Benkadi of Nantoumana, Fokaben of Loutana, Benkadi of M'pègnèso, COFRN of Nièna, Sabounouma of Finkolo, Benkadi of Kouroumasso and Benkadi of Zoloko.

In the North, the period was marked by monitoring the marketing of rice produced during the 2010-2011 campaign in Timbuktu as well as the off-season production within the three Regions (Mopti, Gao and Timbuktu). The volume of rice produced this season was 1,278.598 tons for an overall value of 240,550,365 FCFA, distributed as follows:

- Mopti: 154.848 tons for a total value of 30,315,250 F CFA.
- Timbuktu : 1,082,75 tons valued at 203,265,115 FCFA: 532.75 tons valued at 94,285,950 FCFA in irrigated village perimeters (PIV) and 550 tons for a value of 108,979,165 FCFA in the Lake Horo lowlands.
- Gao: the marketed quantity is estimated at 41 tons for a value of 6,970,000 FCFA

Additionally, IICEM led awareness campaigns for operators along the rice paddy supply chain on behalf of three semi-industrial rice mills: *Planète Distribution*, SOPROTRILAD and RIFAB. It is as a result of these campaigns that IICEM, in collaboration with the Mopti rice office, organized a first-ever meeting between RIFAB rice mill's promoter and rural rice organizations involved in RIFAB's rice paddy supply network.

A meeting, which brought together representatives of the Regional Agriculture Administration (the DRA), Regional Chamber of Agriculture, and 29 rural organization heads, aimed to make each entity aware of the other and to provide a forum to discuss the content of the collaboration agreement that IICEM had facilitated between RIFAB and women's rice OP. These OP will be implicated in supplying RIFAB with rice paddy for processing. The two parties (OP representatives and RIFAB's representative) carefully reviewed the conditions and terms of the collaboration agreement and both committed to honor its integrity. Following this meeting, the OPs have proceeded to informing and sensitizing their members on the ins and outs of the agreement.

These information sessions focused on:

- Paddy quality norms: homogeneity of paddy variety, impurity content (straw, earth, stones...), best farming practices from planting to the harvest;
- Using moisture meters to measure moisture content (12-14%), 100 rural organizations attended a demonstration session on proper meter usage;

- Packaging norms and the traceability of stocks;
- Presenting the intent to purchase terms, and the paddy purchase contract.

On October 18, 2011, RIFAB, in partnership with IICEM and the Mopti Rice Office, organized an agreement-signing ceremony with the regional rice platform. The ceremony's objective was to gain the Mopti Rice Office's support as a strategic partner in RIFAB's supply by means of user fees within the Office's zones (the small rice fields in southern Mopti, some irrigated perimeters and some medium-sized irrigated rice perimeters).

The proper enactment of this agreement involved 22 irrigated perimeter chiefs from 22 villages, representing a total surface area of 565 hectares with an anticipated yield of 3,185 tons; RIFAB's annual rice paddy needs are estimated at 2,000 tons.

Additionally, IICEM's BDS team conducted advisory support visits to the other two partner semi-industrial rice mills in the Mopti region. The advisors noted that *Planète Distribution* was already functioning, while the installation work for RIFAB had been suspended due to connection problem with Mali Energy.

Over the course of this quarter, *Planète Distribution* processed 96.9 tons of rice paddy for 53.295 tons of white rice valued at 19,985,625 FCFA, at the rate of 375,000 FCFA per ton.

## **MAIZE**

### **Support to farmers to improve the quality of maize in order to satisfy the requirements of wholesaler contract holders**

To facilitate farmers' ability to provide wholesalers with high-quality maize (in accordance with the standards of signed contracts), IICEM, by means of its partner NGO BEACIL (in Bougouni) carried out the following activities: (i) training partner farmer organizations on harvest techniques, threshing and tri-sifting practices, conservation, and proper maize storage; (ii) establishing surveillance teams to monitor the traceability of maize to be stored; (iii) training farmers on good business-record keeping documents such as stock sheets, petty cash books, an up-to-date register of all active members, input receipt and distribution logs; (iv) determining the volume of rice which must be stocked in order to repay input loans. This volume was estimated at 748,529 tons at a sales price of 100,000 FCFA per ton for sale to IICEM partner wholesalers

## **SUPPORTING AN ENABLING ENVIRONMENT FOR AGRICULTURE, TRADE, AND PRIVATE SECTOR DEVELOPMENT**

### **Analysis and documentation of the seed certification process in collaboration with the *Agence pour la Promotion de l'investissement au Mali* (Agency for Investment Promotion in Mali)**

During this quarter, the seed certification process was officially validated by the DNA. The validation workshop was held on 29 November 2011 in the presence of public servants specializing in seed certification. This event brought together regional directors, heads of the *Division Législation et Contrôle Phytosanitaire* from the regions of Ségou, Mopti, Sikasso, Koulikoro, the District of Bamako and that of the DNA, the representative of a seed lab, and a representative from a private company specializing in the commercialization of agriculture seeds (Faso-Kaba). IICEM personnel along with agents from the Agency for Investment Promotion in Mali were also present.



The following activities were carried out during the workshops: (i) a presentation of information collected by API-Mali's eRegulations agency for validation by participants. In tandem with the Segou DRA and other structures in charge of seed certification, this activity facilitated understanding the steps, costs, and documents required for the certification of agricultural seeds; (ii) validation of the certification process by the DRA/Ségou by virtue of his signature on all steps necessary for seed certification; (iii) presentation of the simplification report; (iv) official validation of the seed certification procedure by the National Director of Agriculture.

This certification workshop marks the final step in the analysis and documentation of the seed certification process, initiated in April 2010 by IICEM and *API Mali's eRegulations Service*. This process responds to the results indicator relative to the number of policies/regulations /administrative procedures analyzed. This certification process is now available online and accessible to all interested parties.

### **Advocacy Campaign for the Suppression of Restrictions in the Cereals Market**

Within the framework of lobbying for the suppression of restrictions to the marketing of cereals, a campaign initiated by IICEM and currently underway, members of the lobbying committee (including IICEM'S transport advisor) undertook a mission to Sikasso, Koutiala, San and Ségou to reclaim stocks of millet and sorghum held by IICEM partner traders following a cereal export ban. Approximately 2,000 tons of cereal were identified in different storage houses visited. The advocacy committee held a special meeting with the Food Security Commission. Following this meeting, the head of the Food Security Commission wrote a letter to the *Conseil National du Patronat*, after which bans on cereal exportation were lifted and IICEM partner vendors were authorized to sell their stock in the markets of their choice, including the sub-region. This should be considered a significant advancement in the advocacy domain as it is the first time that the government of Mali has made such a decision in favor of cereal vendors.

Additionally, IICEM's Trade and Transportation advisor participated in a workshop for the validation of a report on "Cereal Commercialization in Mali Diagram" as well as the workshop of the Sixteenth Report of the Observatory of Abnormal Practices (OPA) regarding road governance and a Guide for Commercial Drivers in Mali. At this occasion IICEM's Trade and Transportation advisor gave a presentation on the theme Road Governance: The Busiest Corridors for a Competitive Economy.

### **Participation in the third Africa Regional Conference on Irrigation and Drainage**

The Africa Regional Conference on Irrigation and Drainage was held in Bamako from November 29 to December 5, 2011 (CIID). It was organized by the Malian Association of Irrigation and Drainage (AMID). The themes of global climate change and food security were addressed. The conference was intended to provide a forum for researchers, decision-makers, and experts of wide-ranging fields to share information, experience, and expertise regarding drainage and irrigation. It also aimed to find answers to the following questions of particular urgency: What effects could global climate change have on irrigation and farming? What can we do to combat these effects? What ways and means could we pursue to secure an important place for irrigation in the domain of food security without causing detrimental effects on the environment?

Two hundred people from 25 countries participated in this event.

IICEM's participation in the event included:

- Event sponsoring;
- Leading of presentations on irrigation and the SRI technique;

- Presenting an exposé on the SRI farming technique and its results in Mali within IICEM's various agro-ecological intervention zones;
- Three IICEM employees' participation in training on localized irrigation as a practice for global climate change adaptation.

## **STIMULATING ENTREPRENEURSHIP THROUGH SPECIAL ACTIVITIES FUNDS (FI, SAF), AND SMALL BUSINESS DEVELOPMENT**

Over the course of this quarter, IICEM coordinators in the regions of Mopti and Sikasso, along with the IICEM BDS and business development specialists, met to outline a Mechanism for Technical assistance to Partner Businesses.

To strengthen business partners' management capacity in the millet/sorghum and rice value chains and to facilitate their access to grants such as the strategic activities fund (SAF) and the innovative fund (FAEI), IICEM has established an assistance plan for partner businesses. Under this plan, each business that makes it through the grants selection process is assigned a dedicated business advisor to provide personalized coaching. To do this, the project collaborated with the *Programme Stratégies et Techniques pour l'Envol des Petites et Moyennes Entreprises* (STEP). The business advisor puts in place simplified management tools adapted to each business's needs. The agents are also tasked with providing on-going support and advice while also developing the commercial performance of these IICEM partner businesses. The advisors work under the supervision of project specialists in each impacted locality.



## **GENDER-EQUITABLE OPPORTUNITY IN VALUE CHAIN DEVELOPMENT**

Gender-equitable opportunity in value chains has been significantly emphasized during this quarter's activities.

Within the millet value chain, women's plots in strictly feminine or co-ed farming organizations enjoyed the same benefits as those of their male counterparts. These women also benefitted from advisory support from training agents on micro-dose and weeding practices. Additionally, over the course of this reporting period, six women attended a training-of-trainers on post-harvest practices and millet/sorghum quality control techniques.

Likewise, in the rice value chain, female members of farming organizations benefitted from the same training and information sessions on technology packets as their male counterparts. In Timbuktu, where there are 20 rural organizations receiving project assistance, two are all-female (Annya and Nafagoumo of Kabara).

In addition, sensitization of Baramadougou and Kouin (Mopti region) village authorities resulted in more plots for women in new construction zones. Eight women received 2 hectares in Baramadougou and three women got 0.75 hectares in Kouin.

Moreover, this quarter's gender activities focused on the organization and diagnostics of women's processing organizations in Bamako. A control group of organizations was analyzed and compared to *Danaya Céréales*, a women's processing group considered to be a leader within the cereal processing field.

The main objective of diagnostics consists of identifying and evaluating the constraints of the transformation process in order to train a cluster of women's processing units in Bamako and compare their performance against that of *Danaya Céréales* and, consequently, promote concrete practices in order to improve the transformation and commercialization of millet/sorghum.

Three work sessions were held to identify specific challenges associated with transformation and millet/sorghum commercialization with new companies, cooperatives, and processing associations located in Bamako.

Diagnostic exercises revealed constraints/opportunities consistent with USAID's analysis manual.

Analysis Aspect	Observed instances of inequality	Factors influencing inequalities	Conclusions regarding gender-related constraints
<b>PRACTICE AND PARTICIPATION</b>			
Infrastructure: Production location	The lack of suitable production facilities prevents women from improving production, productivity, and product quality.	The lack of suitable processing facilities constitutes a handicap for transformation entrepreneurship	Transformation as a profession must be improved in order to preserve the sanitary integrity and nutritional value of food products.
<b>ACCESS TO RESOURCES</b>			
-Financing: Bank loan to facilitate access to production equipment: grinding mills, hullers, dryers, etc.	The absence of loan guarantees and high interest rates prevent many women in the transformation industry from obtaining loans to purchase necessary equipment.	The high level of poverty among women transformers prevents them from having suitable transformation and storage facilities.	Most women have insufficient capital to obtain the funding needed to create a bankable business plan.
Technical training: Management and accounting	The women's low level of technical training in the transformation industry represents a significant constraint to the successful management of their businesses.	A low level of basic education often impedes professional development.	Women in the transformation industry often lack the technical competency to effectively manage their company.

## SYNERGISTIC ACTIVITIES WITH OTHER PARTNERS

To leverage funding and coordinate with similar donor and government initiatives, and to avoid conflicts and misunderstandings in the field, IICEM places a strong emphasis on developing synergies with other programs.

Over the course of this quarter, in the implementation of its various activities, IICEM collaborated with INTSORMIL in the millet/sorghum value chain on the distribution of new technology packages (Toroniou seed variety micro-dose usage).

IICEM also solicited and secured collaboration with the leaders of Catholic Relief Service (CRS) to provide technical training to women's farming cooperatives in the village of Logo (Bankass) to better orient them in the proper use of the millet/sorghum technology package. CRS was identified because they are already in the field in Bankass (Mopti region).

Concerning the rice value chain, partner organizations E-ATP, Africare, and Syngenta invited IICEM to share its experience with the SRI technique at conferences in Mali and Ghana. At these conferences, around 102 people from four countries in the sub-region benefitted from learning about IICEM's adaptation and implementation of SRI within the Malian context.

Additionally, in supplying the RIFAB semi-industrial rice mill with paddy, the project has strengthened collaborative linkages with the Mopti Rice Office to facilitate smooth operations.

Regarding the analysis and documentation of the seed certification process, IICEM worked in close collaboration with the Agency for Investment Promotion in Mali's eRegulations division as well as with the DRA/Segou.

Another important collaboration with *AMASSA Afrique Verte* and l'OPAM facilitated the successful completion of two training of trainers sessions (NGO officials, DRA officials, and cooperative leaders) in Sikasso and Mopti on millet/sorghum best management practices, post-harvest techniques, and quality control (moisture/impurity level, etc...) Approximately 61 trainers, six of whom were women, were trained across these two regions.

# INDICATORS TABLE

No indicators are available for the period in question (September – November 2011) as this falls at a time when the harvest period is just starting. Next quarter, it will be possible to show the indicators table with the yield and tons of production.

# PROBLEMS / CHALLENGES

We have no problems/challenges to report for this period.